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C. REMARKS

1. Status of the Claims

Claims 1, 2, 4-7, 12-17, and 19-22 are pending in the application. Claims 1, 12 and 16 are independent claims and have been amended. Claims 3, 8-11, and 18 have been cancelled. No claims have been added in this Response.

2. Drawings

Applicant notes that the Examiner did not indicate whether the formal drawings submitted with Applicant's application have been accepted by the Examiner. Applicant respectfully requests the Examiner to indicate whether Applicant's drawings are accepted in the next Office Communication.

3. Claim Rejections - Alleged Anticipation (35 U.S.C. § 102)

Claims 1, 2, 4-7, 12-17, and 19-22 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,185,598 to Farber et al. (hereinafter "Farber"). Applicant respectfully traverses the rejections.

Claims 1, 12, and 16 are respectively directed to a method, a server, and a computer program product that, as amended, each include limitations of:

- Prior to receiving a first request from a client:
 - o analyzing a web page, the web page including one or more hyperlinks, wherein each hyperlink includes a server identifier and a resource identifier;
 - o determining whether the resource identifier corresponds to a server resource that uses client state information;

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- o setting the server identifier to a second server identifier in response to determining that the server resource does not require client state information; and
- o storing the web page with the reset server identifiers;
- receiving the first request from the client computer for the web page;
- retrieving the stored web page with the reset server identifiers; and
- transmitting the retrieved web page to the client computer.

The Office Action rejected these claims as being anticipated by Farber and sets forth various sections of Farber in support of the rejection. For reasons explained in detail below, the Office Action's reliance upon Farber is misplaced, as Farber simply does not teach these steps.

As an initial matter, Applicant's claimed invention is directed towards a method/computer program product of "handling client state information," such as "cookies" that are commonly used to store such client state information. As detailed in Applicant's specification, this state information is often sent from the client back to the server even though it may not be needed in order to handle a particular client request. Cookies include a "path" mechanism that can be used to reduce this unnecessary traffic, however the web server needs to be arranged in a particular fashion in order to use the path mechanism as content that needs client state information is often intermingled with content that does not need client state information.

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As claimed in Applicant's claims 1 and 16, Applicant analyzes existing web pages served by a web server and determines whether hyperlinks included in the web pages reference files that need client state information. If the files do not need client state information, the hyperlink is modified to point to an alternate (second) server instead of the primary server. In this manner, when the web page (with modified hyperlinks) is subsequently provided to a client and the client selects various hyperlinks, hyperlinks that correspond to files that do not need client state information are sent to the alternate (second) server without the unnecessary sending of client state information. On the other hand, if the client selects a hyperlink that uses client state information, the hyperlink still corresponds to the primary server and, therefore, the client state information is provided.

Conversely, Farber teaches a system that "redirects" client requests to different servers in order to off-load processing by the primary (origin) server. Farber teaches that client requests are initially received at the origin server and intercepted by a "reflector" process within the origin server. The reflector determines whether the origin server handles the request or whether the request is passed off to a "repeater" server. If the request is passed off to a repeater server, Farber teaches that the reflector process dynamically determines the "best" repeater server to which to send the request by considering current conditions. When a repeater is selected, the client is provided with a modified resource identifier that points the client to the repeater server, rather than the origin server.

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The above, high-level review of Applicant's claims in comparison with the general teachings of Farber shows that Farber is teaching something altogether different from what is claimed by Applicant. These differences are even more striking when Applicant's specific claim limitations are compared with the teaching of Farber. These differences are detailed below.

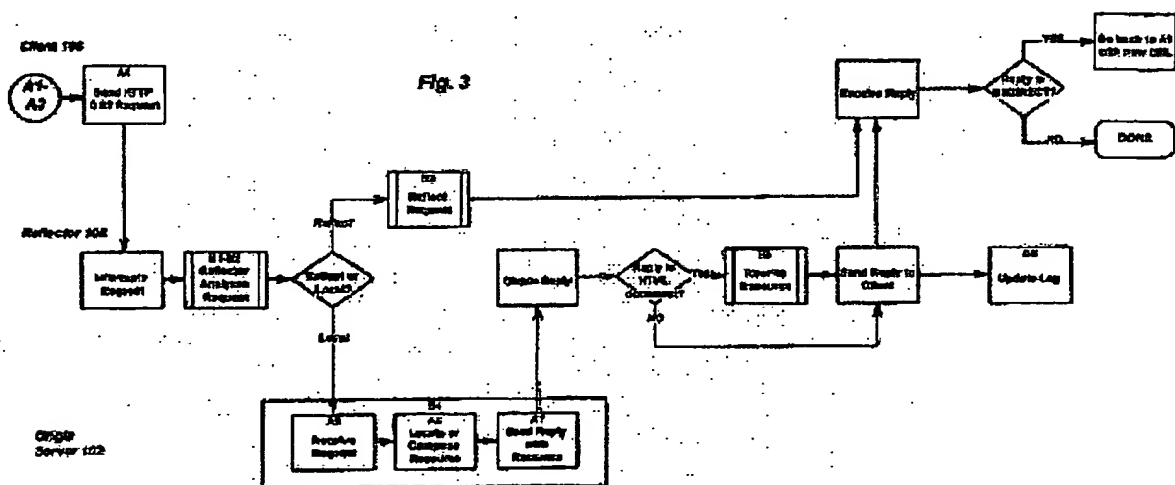
Applicant's claimed invention sets the hyperlinks on a web page to either the server or an alternate server, depending on whether the hyperlink uses client state (i.e., "cookie") data. Applicant claims that the web page is analyzed and server identifiers are reset depending upon whether the resource included in a hyperlink uses client state information. The web page with the reset server identifiers is stored on the server prior to a client request. Figure 1 of Applicant's specification and pages 15-18 of Applicant's detailed description shows that client's claimed invention stores files (172 and 192) on the same web server 140 so that the hyperlink in the web page points to a first server address of web server 140 to map to file 172 (the file, or "resource," that needs client state information) and maps to file 192 (the file or "resource," that does not need client state information). In this manner, in Applicant's claimed invention, when the client computer requests the web page, the web page is immediately servable because the hyperlinks within the web page have already been reset to point at a first or second server identifier depending upon whether the respective hyperlinks refer to resources that require client state information or do not require client state information.

On the other hand, Farber teaches that many steps, including the dynamic rewriting of the web page, after the

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request is received by the client computer. Farber teaches that a "reflector" process running on the origin server intercepts the client's request. The primary focus of Farber is determining whether to reflect the request to an alternate server or perform the server locally on the origin server. Figure 3 of Farber details the many steps performed after a request is received and before the resource (HTML) document is rewritten. Farber teaches that a "best repeater" is computed through an extensive analysis (B1-B2 Reflector Analysis on Fig. 3). If the decision is to process the client's request on the "local" (origin) server, then the origin server (A5) receives the request, (A6) locates or composes the resource, (A7) send a reply to the reflector process 108. If the local (origin) server's reply is an HTML document, then (and only then), does the reflector process dynamically rewrite (step B5) the resource (i.e., HTML document) and send the rewritten resource back to the client.

The extensive processing taught by Farber before rewriting the resource is amply shown in Farber's Figure 3:



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Three key differences come to light between Applicant's claimed invention and the teachings of Farber. First, Farber only modifies the HTML web page if the origin server has been selected for a client's request, while Applicant claims performing the modifications to the HTML web page prior to receiving the first request from the client and storing the web page at the server with the modified server identifiers irregardless of which server is used by the client. Second, because of Farber's focus on selecting a "best" repeater server, the dynamic rewrite of the HTML page does not occur until after the reflector analyzes the client's request, while Applicant's claimed invention has the web page, with altered hyperlinks, prepared and ready prior to receiving the client's initial request. And third, Applicant's claimed invention stores the web page with the reset server identifiers while Farber teaches that the web page is dynamically created.

The key differences between Applicant's claimed invention and the teachings of Farber result in Applicant's claimed invention being able to provide the web page to the client computer system much faster than the teachings of Farber. This is because, in Applicant's claimed invention, the web page is prepared ahead of time rather than having to wait to receive the client request. The need to wait for the client request is inherent in Farber's teachings because Farber is focused on finding a "best" repeater server in order to off-load the origin server as a condition-precedent to serving the requested web page.

In dependent claims 2 and 17, Applicant adds the limitation of "setting the server identifier to a first server identifier in response to determining that the resource uses client state

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information." The Office Action rejects this claim as being anticipated by Farber, citing col. 8, lines 54-58. This section of Farber reads as follows:

To serve a request locally, the request is sent by the reflector to ("forwarded to") the origin server 102. In this mode, the reflector acts as a reverse proxy server. The origin server 102 processes the request in the normal manner (A5-A7). The reflector then obtains the origin server's reply to the request which it inspects to determine if the requested resource is an HTML document, i.e., whether the requested resource is one which itself contains resource identifiers.

This section of Farber does not "set the server identifier" in the HTML document to a first server, or any other server for that matter. Instead, in the cited section, Farber is teaching how the reflector forwards certain requests to the origin server and receives responses from the origin server before providing the document back to the client. Not only does Farber not teach setting the server identifier, as claimed by Applicant, but the cited section buttresses Applicant's assertion that, because Farber is focused on "reflecting" requests to secondary servers, additional steps are taken, this time by the reflector process that resides in the origin server. These additional steps further delay the web site's response to the client computer over the expeditious delivery of the web page by Applicant's claimed invention.

Claims 2 and 4-7 each depend on amended claim 1 and, therefore, are allowable for at least the same reasons that claim 1 is allowable, as explained above. Claims 13-15 each depend on amended claim 12 and, therefore, are allowable for at least the same reasons that claim 12 is allowable. Claims 17 and 19-22 each depend on amended claim 16 and, therefore, are

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allowable for at least the same reasons that claim 16 is allowable.

Conclusion

As a result of the foregoing, it is asserted by Applicant that the remaining claims in the Application are in condition for allowance, and Applicant respectfully requests an early allowance of such claims.

Applicant respectfully request that the Examiner contact the Applicant's attorney listed below if the Examiner believes that such a discussion would be helpful in resolving any remaining questions or issues related to this Application.

Respectfully submitted,

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